- 45. (New) The method of claim 44 wherein the auxiliary information is steganographically retrieved from the original data signal.
- 46. (New) The method of claim 45 wherein the auxiliary information is steganographically encoded in the transformed data signal.
- 47. (New) The method of claim 44 wherein the auxiliary information is steganographically encoded in the transformed data signal.



- 48. (New) The method of claim 40 wherein the embedding of the retrieved auxiliary information in the transformed data signal uses a robust embedding method for the transformed data signal that enables detection of the auxiliary information by a detector.
- 49. (New) The method of claim 48 wherein the auxiliary information is steganographically encoded in the transformed data signal.
- 50. (New) The method of claim 49 wherein the auxiliary information is steganographically retrieved from the original data signal.

## **REMARKS**

With this Preliminary Amendment claims 24-26 and 28-50 are pending in the present application. Claims 28-50 are newly presented herein, and claims 1-23 and 27 have been cancelled without prejudice. Claims 24-26 have been amended in an editorial manner. It is respectfully submitted that no new matter has been added by this Amendment.

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In response to the outstanding Restriction Requirement, the claims of Group II (claims 24-26) are elected for prosecution. Claims 1-23 and 27 have been cancelled herein without prejudice. The right to pursue the non-elected claims (claims 1-23 and 27) in divisional applications is expressly reserved.

Presented above are new claims 28-50, which are believed properly considered with the claims of Group II.

An early Notice of Allowance is respectfully requested.

Respectfully submitted,

Kenneth Lee Levy

Date: July 22, 2002

Kenneth Lee Levy 110 NE Cedar Street Stevenson, WA 98648 509-427-5374

Attachment: Marked-up Claims

**PATENT** 

## Marked-up Claims

- 24. (Amended) A method of bypassing removal of embedded data during digital bitrate reduction [(i.e. compression)] which includes using separate data embedding techniques for non-compressed and compressed data.
- 25. (Amended) The method of claim 24 in which the auxiliary information is not lost during the compression [(a.k.a. encoding)] by:
  - (a) retrieving the auxiliary information from the non-compressed data;
  - (b) compressing the combined data; and
- (c) re-embedding the auxiliary information [using an appropriate technique] in the compressed data, whereby the compressed data <u>comprises</u> [still has] the auxiliary information embedded <u>therein</u>.
- 26. (Amended) The method of claim 24 in which the auxiliary information is not lost during the decompression [(a.k.a decoding)] by:
- (a) retrieving the auxiliary information from the compressed data [using an appropriate technique];
  - (b) decompressing the compressed information; and
- (c) embedding the auxiliary information in the non-compressed data, whereby the non-compressed data <u>comprises</u> [still has] the auxiliary information embedded <u>therein</u>.
- 28. (New) The method of claim 24 wherein the digital bit-rate reduction comprises compression.
- 29. (New) The method of claim 25 wherein the compression comprises encoding.
  - 30. (New) The method of claim 26 wherein the decompression comprises decoding.

- 31. (New) The method of claim 28 wherein the compression comprises encoding.
  - 32. (New) The method of claim 28 wherein the decompression comprises decoding.
  - 33. (New) A method comprising:

retrieving auxiliary information from a data signal, wherein the auxiliary information is encoded in the data signal, and wherein the auxiliary information is retrieved from the data signal while the data signal comprises a non-compressed form;

compressing the data signal; and

embedding the retrieved auxiliary information in the compressed data signal, wherein the compressed data comprises the retrieved auxiliary information.

- 34. (New) The method of claim 33, wherein the retrieved auxiliary information is steganographically retrieved from the compressed data signal.
- 35. (New) The method of claim 34, wherein the retrieved auxiliary information is encoded in the compressed data signal in the form of a steganographic watermark.
- 36. (New) The method of claim 33 wherein the data signal includes the auxiliary information embedded therein during said compressing step.
  - 37. (New) A method comprising:

retrieving auxiliary information from a data signal, wherein the auxiliary information is encoded in the data signal, and wherein the auxiliary information is retrieved from the data signal while the data signal comprises a compressed form;

decompressing the compressed data signal; and

embedding the retrieved auxiliary information in the de-compressed data signal,

whereby the de-compressed data signal comprises the auxiliary information embedded therein.

- 38. (New) The method of claim 37, wherein the retrieved auxiliary information is steganographically encoded in the de-compressed data signal.
- 39. (New) The method of claim 37, wherein the retrieved auxiliary information is encoded in the de-compressed data signal in the form of a steganographic watermark.
  - 40. (New) A method comprising:

retrieving auxiliary information from an original data signal, wherein the auxiliary information is encoded in the original data signal;

performing a transformation on the original data signal to create a transformed data signal; and

embedding the retrieved auxiliary information in the transformed data signal, wherein the transformed data comprises the retrieved auxiliary information.

- 41. (New) The method of claim 40 wherein the auxiliary information is steganographically retrieved from the original data signal.
- 42. (New) The method of claim 41 wherein the auxiliary information is steganographically encoded in the transformed data signal.
- 43. (New) The method of claim 40 wherein the auxiliary information is steganographically encoded in the transformed data signal.
- 44. (New) The method of claim 40 wherein the transformation causes the auxiliary information not to be detectable from the transformed data signal.

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- 45. (New) The method of claim 44 wherein the auxiliary information is steganographically retrieved from the original data signal.
- 46. (New) The method of claim 45 wherein the auxiliary information is steganographically encoded in the transformed data signal.
- 47. (New) The method of claim 44 wherein the auxiliary information is steganographically encoded in the transformed data signal.
- 48. (New) The method of claim 40 wherein the embedding of the retrieved auxiliary information in the transformed data signal uses a robust embedding method for the transformed data signal that enables detection of the auxiliary information by a detector.
- 49. (New) The method of claim 48 wherein the auxiliary information is steganographically encoded in the transformed data signal.
- 50. (New) The method of claim 49 wherein the auxiliary information is steganographically retrieved from the original data signal.